

# 12990

Diag. Cht. Nos. 1253, 1253 Insert & 1254.

<b>Form 504</b>	
U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
<b>DESCRIPTIVE REPORT</b>	
Type of Survey	Chart Topography
Field No. Ph-6605	Office No. T-12990
<b>LOCALITY</b>	
State	Florida
General locality	Pavilion Key to Lostmans River
Locality	Lostmans River
NOV 19 65 - JULY 1967	
<b>CHIEF OF PARTY</b>	
W.H. Shearouse, Chief of Party	
V.R. Sobieralski, Photo. Office Rock- ville, Md.	
<b>LIBRARY &amp; ARCHIVES</b>	
DATE	December 1967

USCOMM-OC 5087

12990  
06621

## DESCRIPTIVE REPORT - DATA RECORD

T - 12990

PROJECT NO. (II):  PH-6605		
FIELD OFFICE (III):  PHOTOGRAMMETRIC OFFICE (III): ESSA Headquarters Rockville, Maryland		CHIEF OF PARTY  W. H. Shearouse  OFFICER-IN-CHARGE  V. Ralph Sobieralski
INSTRUCTIONS DATED (II) (III):  Field: February 8, 1965 and July 30, 1965 Aerotriangulation: May 12, 1966 Photogrammetric Office: May 31, 1966, June 13, 1966 and December 8, 1966		
METHOD OF COMPILATION (III):  B-8 Stereoplotter and Graphic		
MANUSCRIPT SCALE (III):  1:40,000		STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):  1:30,000
DATE RECEIVED IN WASHINGTON OFFICE (IV):		DATE REPORTED TO NAUTICAL CHART BRANCH (IV):
APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III):  N.A. 1927		VERTICAL DATUM (III):  MEAN SEA LEVEL EXCEPT AS FOLLOWS: <i>Elevations shown as (25) refer to mean high water</i> <i>Elevations shown as (5) refer to sounding datum</i> <i>i.e., mean low water or mean lower low water</i>
REFERENCE STATION (III):  FIG. 1887		
LAT.:  25°30'25.684"	LONG.:  81°12'33.142"	<input type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV):  426,597.33      x = 431,000.69		STATE  Florida
		ZONE  East Zone
ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE. WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.		

## DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (III):		DATE:
W. H. Shearouse (premarked control)		11/3/65
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):		
March, 1967, Mean-high-water-line located photogrammetrically using B-8 stereoplotter		
DATE OF PHOTOGRAPHY - NOVEMBER 1965		
PROJECTION AND GRIDS RULED BY (IV):		DATE
R. A. Lillis		May 1966
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
R. K. DeLawder		June 1, 1966
CONTROL PLOTTED BY (III):		DATE
J. H. Taylor		February 1967
CONTROL CHECKED BY (III):		DATE
J. A. Mooney		February 1967
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
I. I. Saperstein		February 15, 1967
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III):		DATE
J. C. Richter		March 1967
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
J. P. Battley, Jr.		September 1967
REMARKS:		
Field Edit by: W. H. Shearouse July 1967		

## DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

(L) RC-8 (infrared and color) and (M) RC-9 (color)

## PHOTOGRAPHS (III)

Above MLW

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
65-M(C)-999-1004	11/21/65	10:00	1:60,000	Lostmans R. 2.8'
65-L-9305-9310	11/21/65	12:44	1:33,000	Pavilion K. 2.8'
65-L-9367-9378	11/21/65	13:34	1:33,000	Pavilion K. 4.2'
				Chatham R. 3.6'
				Pavilion K. 3.9'
65-L-9401-9412	11/21/65	14:01	1:33,000	Chatham R. 3.4'
65-M(C)-1022-1027	11/21/65	10:24	1:60,000	Chatham R. 3.4'
				Onion K. 0.0'
65-M(C)-973-979	11/21/65	9:20	1:60,000	Chatham R. 1.5'
65-L-9347-9352	11/21/65	13:16	1:33,000	Chatham R. 3.8'

## TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: KEY WEST (Computations based on actual readings at Ref. Sta.)		1.3	1.6
COORDINATE STATION: LOSTMANS RIVER ENTR.		3.0	Diur. 3.9
ONION KEY		0.6	" 0.9
SUBORDINATE STATION: CHATHAM RIVER ENTR.		3.3	" 4.2
PAVILION KEY		3.5	" 4.4

WASHINGTON OFFICE REVIEW BY (IV):

DATE:

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (III): \*25

RECOVERED:

18

IDENTIFIED:

16 (Premarked)

NUMBER OF BM(S) SEARCHED FOR (III):

none

RECOVERED:

IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

none

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

none

REMARKS:

\*denotes control located for entire project, including surveys T-12986, T-12988, T-12989 and T-12990



**SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT  
T-12986, T-12988, T-12989 and T-12990  
Job FH-6605  
September 1967**

This project is comprised of four maps, compiled to provide the base for new Chart 642-SC. Chart 642-SC will be published at 1:40,000 scale and covers the coastline of the Gulf of Mexico and bordering inland waterways from Naples to Lostmans River, Florida. The area is currently covered by 1:80,000 scale Conventional Charts 1253 and 1254.

Field inspection was accomplished during October 1965 and was limited to the premarking of horizontal control prior to flying the bridging photography.

The area of these surveys was flown November 20 and 21, 1965.

As a result of higher priority projects, completion of bridging for this project was delayed until January-February 1967. Five strips of 1:60,000 scale color photographs were bridged by analytic aerotriangulation methods.

The manuscripts were compiled in the Washington office using the photogrammetric instructions for compiling topography to chart scale. Compilation was achieved on the B-8 stereo-plotter utilizing 1:60,000 scale color photography and 1:40,000 scale infrared photography. Color prints at 1:20,000 scale were also available to office identify aids and landmarks, but the majority of the aids to navigation had to be located by field methods during field edit.

Field edit was accomplished in June-July 1967. It encompassed the verification of compiled features, the location and/or verification of all aids to navigation and landmarks and a geographic names investigation.

Application of field edit corrections and additions, including a plethora of daybeacons and lights, was completed by the Washington compilation office in August 1967. Nineteen pages of Forms 567 were listed, scaled and submitted to the Marine Chart Division for the positioning of landmarks and aids to navigation.

A "Chart Division Manuscript Copy" of each manuscript was supplied the Marine Chart Division prior to the application of geographic names.

A "Registration Manuscript Copy" will be registered in the Bureau Archives under their respective T-numbers. Ozalid copies of these were also sent to the Marine Chart Division.

Submitted by:

Jeter P. Battley, Jr.

Jeter P. Battley, Jr.

# OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet No.

Sq. Mi.

T-12986

34

T-12988

81

T-12989

100

T-12990

137

TOTAL

352

Hydrography  
from the Corps

The U.S.  
Ar  
For a

## JOB PH-6605

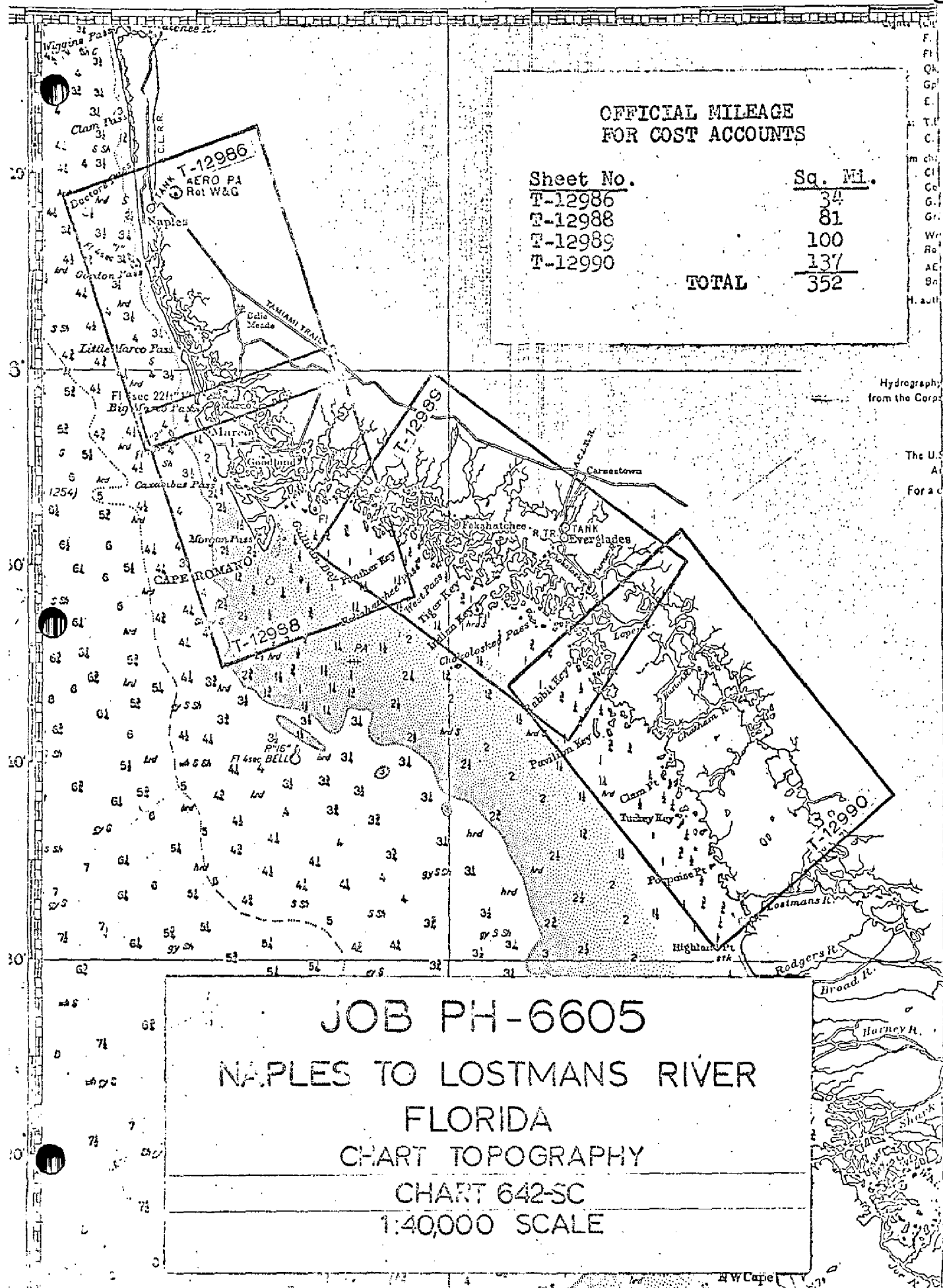
## NAPLES TO LOSTMANS RIVER

## FLORIDA

## CHART TOPOGRAPHY

## CHART 642-SC

## 1:40,000 SCALE



## Field Report

JOB PR-6005

Lostmans River to Naples, Florida  
(Chart 842-80)

In accordance with Instructions dated July 30, 1965, required stations have been premarked during the period October 4 through 29, 1965. Through courtesy extended by the Rangers of the Everglades National Park, headquarters were maintained at their boat basin at Everglades City, throughout the job.

1. METHODS

Unbleached muslin was used for all stations as the white polyethylene plastic sheeting could not be obtained in the Miami area, nor could the VisQueen factory in Flemington, N. J. furnish it in the desired thickness. Targets were made with a triangle 12 feet on the side, for the stations. A triangular frame was constructed of 1"x 4"x 12' boards and centered over the station mark, covered with precut cloth, and staked to the ground. 13 stations were thus marked; 3 were premarked by the substitute station method. (There is one exception to centering the triangle over the station mark: Private survey station CT 128, COLLIER PROPERTIES, 1962 was premarked with station mark at apex of triangle. It is so shown on the CSI card.) All wing panels are the 25-foot runner type, the signal cloth being 36/38 inches wide. Target <sup>1</sup>/<sub>2</sub> in the examples furnished with Job Instructions--was used in all but three instances, the variations being clearly shown in the sketches on Form 152Is.

Station JONESON, 1837, is located under the steps leading to an observation tower. The southeast corner of the tower was located as a substitute station. The tower is 17 feet high, 18 feet square and is gray with a white guard rail around its top. It should show well on the photographs.

Station ONION, 1928, was double-premarked. That is, a triangle was centered over the station and one placed some



## 2.

50 feet to the west, angle and distance being recorded to the west, or substitute one. Onion Key, on which the station is located, is an Indian mound and the Park Service Authorities requested that we not cut anymore vegetation than necessary. In order to eliminate possibility of shadow interference, the foregoing plan was used.

2. HISTORY

Stations originally called for to be premarked were BROAD, FIG, ONION, SEMINOLE, PAVILION KEY, LOPEZ, EVERGLADES, GOMEZ, ROYAL PALM, CAPE ROMANO, SOUTH BASE, MEADE, and NAPLES. Of these, GOMEZ, CAPE ROMANO and SOUTH BASE are destroyed. The others have been premarked. Subsequent oral instructions said to premark FANKA and BEACH. BEACH is destroyed; FANKA was premarked.

Several of the stations are in heavily wooded areas. No suitable nearby place was available for a substitute station, so the trees were cleared at the station site. Special attention was paid to shadow problems and it is believed these have been overcome, especially if the photos are taken between 9 AM and 3/3:30 PM.

During the course of work, it was discovered that Johnson-Hall & Associates, Inc., Land Surveyors and Civil Engineers, of Fort Myers, Florida, had established second order Geodimeter traverse control in the Cape Romano-Marco Island area, which traverse originated and ended on Coast and Geodetic Survey stations. In lieu of destroyed stations CAPE ROMANO and SOUTH BASE, three of these stations were premarked. They are GT 128, COLLIER PROPERTIES, 1962, GT 129, COLLIER PROPERTIES, 1962, and REFERENCE MONUMENT NO. 4, COLLIER PROPERTIES, 1965. Information on these stations and other parts of the Johnson-Hall work, is being forwarded with Job data. Their work appears to have been carefully and accurately done. Should the stations submitted, prove accurate for our purposes it would be well to keep in mind, as they have established similar control north and south of Fort Myers along the coastline for a considerable distance, I am informed.

While recovering station JOHNSON, 1887, a nearby station—COLLIER EREL, 1960—was found. No information was furnished for this C&GS station nor does it appear on the triangulation diagram. Florida Vol. II, INDEX HORIZONTAL CONTROL DATA, was

3.

not furnished , in which the station is described. COLLIER, 1960, is being used by an oil exploration company as a LORAC station site. They have a 145 foot radio antenna erected on it. This station is located in a white sand area and while it was not called for in the instructions, as an experiment, it was premarked with orange-colored signal cloth. It is located about 260 feet south of JOHNSON, 1987.

### 3. SUMMARY

Coast & Geodetic Survey stations searched for: 22  
Recovered: 15  
Premarked: 13  
Lost or destroyed: 7  
Private survey stations premarked: 3.

Respectfully submitted,  
11/3/65

*William H. Shearouse*

William H. Shearouse,  
Chief, Photo Party 751

PHOTOGRAMMETRIC PLOT REPORT  
JOB PH-6605  
NAPLES TO LOSTMANS RIVER, FLORIDA

February 15, 1967

21. Area Covered

This report covers an area from Naples to Lostmans River, Florida, consisting of three (3) 1:40,000 scale T-sheets -- T-12986 N and S. T-12989 and T-12990 N and S.

22. Method

Analytic aerotriangulation methods were used to bridge five strips of 1:60,000 color "M" photography. Control was not furnished for the southeast terminals of Strips 3 and 4; Strip 4, therefore, was tied to Strip 1 and Strip 3 was tied to Strip 4 by common passpoints built up from Strip 1.

The attached sketch shows the strips bridged and the placement of triangulation furnished that was used in the final adjustment.

Mercator coordinate values have been furnished for all bridge points on the IBM readout.

23. Adequacy of Control

Most horizontal control was premarked with white panels; although, several control stations were identified by the substitute station method.

Premarked station BROAD 1928 could not be seen on the photographs. Station FIG 1887 was therefore used as a terminal for Strip 2.

A memorandum from Mr. Richard Stokes, The District Ranger, Everglades National Park, indicates the possibility that the target at ONION 1928 had been disturbed prior to photography. This station was used as the terminal on Strip 1. The substation for ONION was not used in the adjustment but was merely a "floater" and held very well. However, common tie points between Strips 1 and 2 in the vicinity of ONION did not agree by about 25 feet. This discrepancy could not be resolved without field investigation. Nonetheless, it is believed that the bridge is adequate for 1:40,000 scale chart compilation.

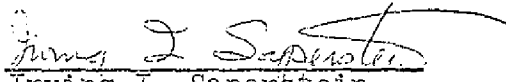
The control used in the final adjustment is adequate. Closures to control have been tabulated and are part of this report.

The high-water line or marsh was used for vertical control needed for the adjustment.

25. Photography

The definition and quality of the color diapositives were very poor as these photographs were taken under adverse conditions.

Respectfully submitted:

  
Irving I. Saperstein

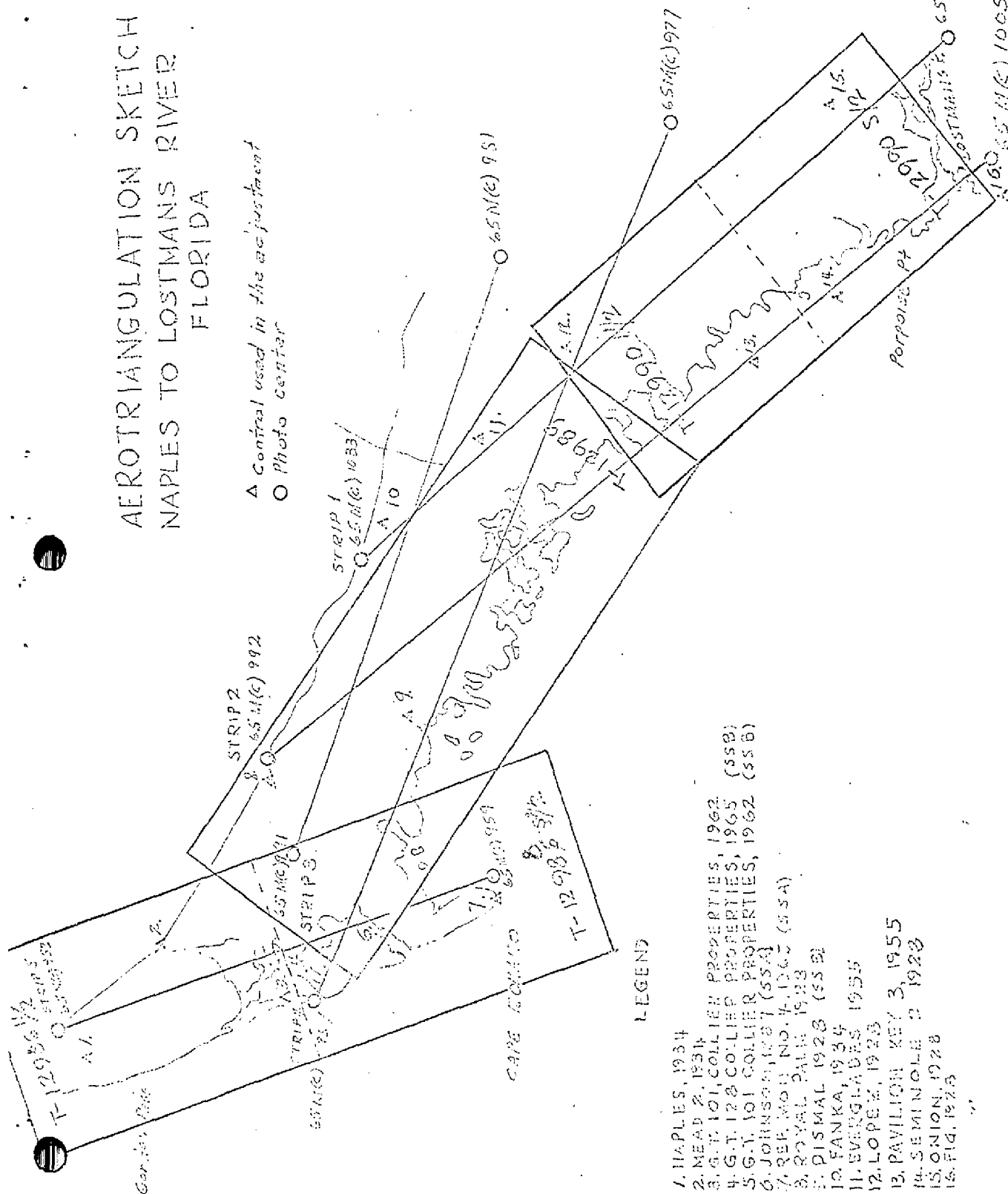
Approved and Forwarded:

  
Henry P. Eichert



Gar. 31, 1916

Δ Control used in the adjustment  
○ Photo Center



- 2  
3  
4  
5  
6

1.14.2ES, 1934

2. MEAD 2, 1934

3. G. T. LOI, COLLIER PROPERTIES, 1962.

U.S. COLLEGE, 1965 (655)

57-101 COLLEGE 1962 (356)

Q. 6. Johnsen, 1951 (55)

7. Ref. No. 4.1265 (55A)

3,800 3,114 1933

DISMAL 1928 (553)

12. FANKA, 1934

11. EVERGLADES 1956

12, Lopez N. 1933

13. PAVILION KEY 3 1955

15, PAULSON & COMPANY, 1922  
 16, CEMINOLE, 1922

22-61147-4

5071041.1923

COMPILATION REPORT  
T-12990

31. Delineation

Both graphic and instrument methods were used to compile this manuscript. Color plates at a scale of 1:60,000 were set on the B-8 stereoplotter. The manuscript was then partially compiled at the required 1:40,000 scale. Using this partial compilation for control, the manuscript was completed graphically using infrared photography ratioed to manuscript scale.

32. Control

Identification, density and placement of control were adequate.

33. Supplemental Data

None

34. Contours and Drainage

Contours - inapplicable; Drainage - all drainage has been shown.

35. Shoreline and Alongshore Details

Shoreline was office interpreted using infrared photography. No field inspection was available. The quality of the 1:60,000 color photography was so poor that no shoal or channel lines could be identified.

36. Offshore Details

None

37. Landmarks and Aids

There are no landmarks or aids in the area covered by this manuscript.

38. Control for Future Surveys

None

39. Junctions

Junction has been made and is in agreement with T-12989 to the north. There are no other contemporary surveys.

40. Horizontal and Vertical Accuracy

No comment

41. - 45.

46. Comparison with Existing Maps

Comparison has been made with C&GS Surveys T-4452 and T-4453, 1:20,000 scale, dated February 22, 1927, and with Hydrographic Surveys H-5056 and H-5066.

47. Comparison with Nautical Charts

Comparison has been made with Nautical Chart No. 1254 (Chatham River to Clam Pass), scale 1:80,000, 5th Edition, dated April 26, 1965, and Chart No. 1253 (East Cape to Mormon Key), scale 1:80,000, revised to January 16, 1961.

Submitted by:

*Jacqueline B. Phillips*

J. B. Phillips

Approved by:

*K. N. Maki*

K. N. Maki

FIELD EDIT REPORT, JCS FM-6605 (Chart 642-SE)

MAPS T-12986, T-12988, T-12989, T-12990

In accordance with Field Edit Instructions dated May 5, 1967, reference C1413.

51. METHODS

All major rivers, creeks and passages were ridden out to verify delineation of shoreline, existence of small keys and islets, and for addition of low-water and shoal features where practical.

Areas of Maps T-12990 and T-989 lying within the Everglades National Park were gone over with the District Park Ranger for his comment and suggestions.

Many aids to navigation could not be positively identified on the photographs. These and other chartable features such as piles and stakes, were located by sextant fix or theodolite cuts. Objects for the fixes and points occupied for cuts, were identifiable images pricked on the 1:40,000 scale ratio infrared photographs. These were numbered 90-A, B, etc., 89-A, B, etc., 88-A, B, etc., and 86-1, 2, etc., to denote what map the photo point is in. A short description will be found on the photographs or in the sketchbook. Fixes are recorded in 2 sketchbooks, numbered 1 and 2.

Due to the nearness of the photo points to most of the day-beacons--caused by narrow streams in which the aids are located--practically all the fixes had to be plotted on pages of paper, which were oriented under the cronaflex print of the map manuscript, thus determining the position of the aid. The point was then pricked and labelled. These pages of graphic fixes are submitted.

In some areas the image of the daybeacons could be seen on



page 2

the 1:20,000 scale transparencies. These were marked direct and cross-reference made on the Field Edit Sheet or Cronaflex.

A number of aids to navigation were office identified, positions scaled and Form 567 made. Identification of a few of these was incorrect. (See the Cronaflex for correct position.) All others were visually verified, dates being noted on Form 567.

No positions were scaled in the field. However, Form 567 is submitted, accounting for all nonfloating aids to navigation (and Landmarks).

Additions, corrections and deletions have been noted on the FIELD EDIT SHEET-DISCREPANCY PRINT with cross-referencing to the photographs by number.

Violet ink was used for field edit notes.

In addition to the Field Edit Sheet and Cronaflex for each map, field edit information will be found for Map T-12990 on photographs: 65M(c)1000 thru 1005, 1022, 1023, 1024, 1026; and ratioed infrared 65L9367R, 9368R, 9372R, 9373R, 9374R, 9404R, and 9411R.

For T-12989: 65M(c)968 thru 972, 986, 1028; ratioed infrared 65L9339R, 9345R, 9346R, 9377R, 9398R, 9399R; and certain ones of the 1:20,000 scale color transparencies 9238 thru 9255.

For T-12983 and T-12986: 1:20,000 color transparencies 65L9198 thru 9202, 9207 thru 9215, 9221, 9225, 9231, 9232, 9235, 9236, 9237; and, ratioed infrared 65L9264R, 9268R, 9269R, 9270R, 9276R, 9278R, 9279R thru 9282R, 9285R, 9293R, 9294R, 9295R, 9328R, 9335R, and 9337R.

## 52. ADEQUACY OF COMPILATION

These maps are well-compiled. After application of field edit information they will be adequate. \*

## 53. MAP ACCURACY

No tests were specified.

## 54. RECOMMENDATIONS

None offered.

55. EXAMINATION OF PROOF COPY

Not required.

GEOGRAPHIC NAMES

This is the subject of a special report.

Submitted 7/10/67

*William H. Shearouse*

William H. Shearouse  
Chief, Photo Party 60



REVIEW REPORT T-12990 (Chart 642-SC)  
Chart Compilation  
September 1967

61. General Statement

(see Summary)

62. Comparison with Registered Topographic Surveys

Comparison was made with surveys T-4452 and T-4453, scale 1:20,000, dated February 22, 1927. These surveys are superseded as a base for nautical charting in area common to T-12990.

63. Comparison with Maps of Other Agencies

None - there are no USGS quadrangles in the area of T-12990.

64. Comparison with <sup>Prior</sup> Contemporary Hydrographic Surveys

Comparison was made with surveys H-5056 and H-5066, scale 1:20,000, dated 1930.

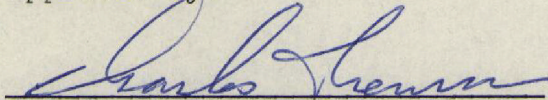
65. Comparison with Nautical Charts

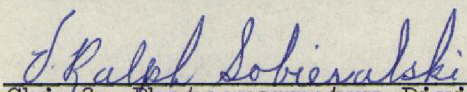
Comparison was made with Chart 1254, (Chatham River to Clam Pass), scale 1:80,000, 5th Edition, dated April 26, 1965. All differences, noted on the discrepancy print, between the published chart and the new survey were resolved during field edit. A copy of T-12989 with field edit corrections and additions applied, was furnished to the Small Craft Chart Branch prior to review. No changes of consequence to nautical charting were made during review.

66. Adequacy of Results and Future Surveys

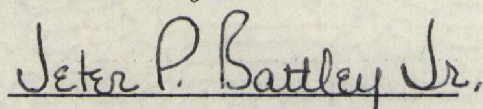
The four maps of this project comply with the project instructions and are within the National Standards of Map Accuracy.

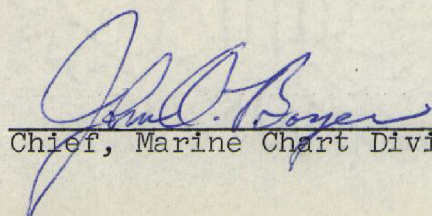
Approved by:

  
Chief, Photogrammetric Branch *DLB*

  
Chief, Photogrammetry Division  
11-27-67

Reviewed by:

  
Jeter P. Battley Jr.

  
Chief, Marine Chart Division



## GEOGRAPHIC NAMES

## FINAL NAME SHEET

PH-6605 (Lostmans River, Fla.)  
T-12990

Alligator Bay

Alligator Cove

Alligator Point

Axe Handle Creek

Bird Key (move northward)

Bogges Point

Buzzard Key (added to Chart 1253)

Cabbage Bay

Chatham Bend

Chatham River

Clam Point

Crab Key Bight

Cross Bay

Deer Island

Deer Island Creek

Dog Key

Duck Rock

Duck Rock Cove

Everglades National Park

Farm Creek

First Bay



First Huston Bay

Gopher Key

Gopher Key Creek

Gun Rock Point

Hog Key

Huston Bay

Huston River

Key McLaughlin

Lopez River

Lost Lake

Lostmans River

Mormon Key

Mosquito Key

New River

North Plover Key (changed from Turkey Key)

Old Turkey Key (changed from Snake Key)

Onion Key

Onion Key Bay

O'Possum Key

Oyster Bay

Pavil~~i~~on Key

Pelican Bay

Plate Creek Bay

Plover Key

Porpoise Point

Rabbit Key

Rabbit Key Pass

Rookery Bay

Second Bay

Seminole Point

Starter Bay

Sunday Bay

Toms Bight

Toms Creek

Turkey Key (added to Chart 1253)

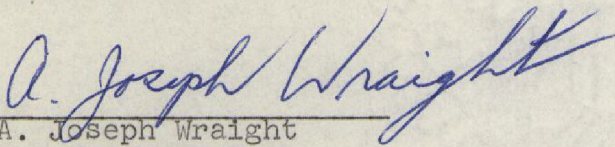
Turtle Key

Two Island Bay

Wood Key

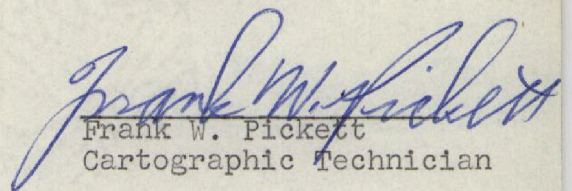
Wood Key Cove

Approved by:



A. Joseph Wraight  
Chief Geographer

Prepared by:



Frank W. Pickett  
Cartographic Technician

T-12990  
Supplemental Name List

Alligator Creek  
Bird Key Bight  
Cannon Bay  
Charley Creek  
Chevelier Bay  
Chevelier Point  
Highland Beach  
Highland Beach Point  
House Hammock Bay  
Huston Coves  
Jungle Bay  
Leon Hamilton Place  
Lostmans Five  
Lostmans River Ranger Station  
New Turkey Key  
Northwater  
Oyster Creek  
Plate Creek  
Southwater  
Sweetwater  
Ten Thousand Islands  
The Watson Place  
Third Bay  
Weeks Lakes

Approved by:

A. Joseph Wraight

Prepared by:

Frank W. Pickett  
Frank W. Pickett

